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EXAMINER
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STARKS, WILBERT L

ART UNIT	PAPER NUMBER
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2129

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/887,824

Applicant(s)

HUBBELL ET AL.

Examiner

Wilbert L. Starks, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 19-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

Claims 1-54 have been examined. In consideration of the date issues in this case, the §102 rejections are withdrawn. Further, the claim objections of the previous action is withdrawn. The 101 rejections are maintained, as explained below.

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. §101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

the invention as disclosed in claims 1-17 and 19-54 is directed to non-statutory subject matter.

2. Regardless of whether any of the claims are in the technological arts, none of them is limited to practical applications in the technological arts. Examiner finds that *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) controls the 35 USC §101 issues on that point for reasons made clear by the Federal Circuit in *AT&T Corp. v. Excel Communications, Inc.*, 50 USPQ2d 1447 (Fed. Cir. 1999). Specifically, the Federal Circuit held that the act of:

...[T]aking several abstract ideas and manipulating them together adds nothing to the basic equation. *AT&T v. Excel* at 1453 quoting *In re Warmerdam*, 33 F.3d 1354, 1360 (Fed. Cir. 1994).

Examiner finds that Applicant's "goal" references are just such abstract ideas.

3. Furthermore, Applicant has amended the language to recite: "...the goal being **associated** with a training objective of a student." The word "associated" is undefined and it is unclear whether this word limits the claims to statutory subject matter. Applicant asserts that the "training objective of a student" "limitation" makes the claims statutory, but it is unclear what this phrase has to do with the invention beyond a vague "association" with it. Is the association a close one where the goal is the "training objective", or is it a loose one where they were simply made or considered at the same time...or even just some mental association. Applicant's added phraseology does not clarify these issues and does not limit the claim to statutory subject matter. As such, it makes the disclosure nonstatutory in nature.

4. Further, in claim 10, Applicant recites that the "feedback" or display of information "motivates" accomplishment of a goal. "Motivation" is a human thought and the inclusion of it does not make the invention statutory. Patents are not available for persuasive speech or persuasive information displayed to a user. Such things do not define a composition of matter, apparatus, method, or product of manufacture. They are simply non-functional data not embodied on any medium.

5. Examiner bases his position upon guidance provided by the Federal Circuit in *In re Warmerdam*, as interpreted by *AT&T v. Excel*. This set of precedents is within the same line of cases as the *Alappat-State Street Bank* decisions and is in complete

agreement with those decisions. *Warmerdam* is consistent with *State Street*'s holding that:

Today we hold that *the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price*, constitutes a practical application of a mathematical algorithm, formula, or calculation because it produces 'a useful, concrete and tangible result' -- *a final share price momentarily fixed for recording purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.* (emphasis added) *State Street Bank* at 1601.

6. True enough, that case later eliminated the "business method exception" in order to show that business methods were not per se nonstatutory, but the court clearly *did not* go so far as to make business methods *per se* statutory. A plain reading of the excerpt above shows that the Court was *very specific* in its definition of the new *practical application*. It would have been much easier for the court to say that "business methods were per se statutory" than it was to define the practical application in the case as "...the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price..."

7. The court was being very specific.

8. Additionally, the court was also careful to specify that the "useful, concrete and tangible result" it found was "a final share price momentarily fixed for recording purposes and even accepted and relied upon by regulatory authorities and in subsequent trades." (i.e. the trading activity is the further practical use of the real world

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monetary data beyond the transformation in the computer – i.e., “post-processing activity”.)

9. Applicant cites no such specific results to define a useful, concrete and tangible result. Neither does Applicant specify the associated practical application with the kind of specificity the Federal Circuit used.

10. Furthermore, in the case *In re Warmerdam*, the Federal Circuit held that:

...[T]he dispositive issue for assessing compliance with Section 101 in this case is whether the claim is for a process that goes beyond simply manipulating ‘abstract ideas’ or ‘natural phenomena’ ... As the Supreme Court has made clear, ‘[a]n idea of itself is not patentable, ... taking several abstract ideas and manipulating them together adds nothing to the basic equation.’ *In re Warmerdam* 31 USPQ2d at 1759 (emphasis added).

11. Since the Federal Circuit held in *Warmerdam* that this is the “dispositive issue” when it judged the usefulness, concreteness, and tangibility of the claim limitations in that case, Examiner in the present case views this holding as the dispositive issue for determining whether a claim is “useful, concrete, and tangible” in similar cases.

Accordingly, the Examiner finds that Applicant manipulated a set of abstract “goals” to solve purely algorithmic problems in the abstract (i.e., what *kind* of “goal” is used?

Algebraic word problems? Boolean logic problems? Fuzzy logic algorithms?

Probabilistic word problems? Philosophical ideas? Even vague expressions, about which even reasonable persons could differ as to their meaning? Combinations

thereof?) Clearly, a claim for manipulation of “goals” is provably even more abstract (and thereby less limited in practical application) than pure “mathematical algorithms”

which the Supreme Court has held are per se nonstatutory – in fact, it *includes* the expression of nonstatutory mathematical algorithms.

12. Since the claims are not limited to exclude such abstractions, the broadest reasonable interpretation of the claim limitations includes such abstractions. Therefore, the claims are impermissibly abstract under 35 U.S.C. 101 doctrine.

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13. Since *Warmerdam* is within the *Alappat-State Street Bank* line of cases, it takes the same view of “useful, concrete, and tangible” the Federal Circuit applied in *State Street Bank*. Therefore, under *State Street Bank*, this could not be a “useful, concrete and tangible result”. There is only manipulation of abstract ideas.

14. The Federal Circuit validated the use of *Warmerdam* in its more recent *AT&T Corp. v. Excel Communications, Inc.* decision. The Court reminded us that:

Finally, the decision in *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) is **not to the contrary**. \*\*\* The court found that the claimed process did nothing more than manipulate basic mathematical constructs and concluded that ‘taking several abstract ideas and manipulating them together adds nothing to the basic equation’; hence, the court held that the claims were properly rejected under §101 ... Whether one agrees with the court’s conclusion on the facts, the holding of the case is a straightforward application of the basic principle that mere laws of nature, natural phenomena, and abstract ideas are not within the categories of inventions or discoveries that may be patented under §101. (emphasis added) *AT&T Corp. v. Excel Communications, Inc.*, 50 USPQ2d 1447, 1453 (Fed. Cir. 1999).

15. Remember that in *In re Warmerdam*, the Court said that this was the dispositive issue to be considered. In the *AT&T* decision cited above, the Court reaffirms that this is the issue for assessing the “useful, concrete, and tangible” nature of a set of claims under 101 doctrine. Accordingly, Examiner views the *Warmerdam* holding as the dispositive issue in this analogous case.

16. The fact that the invention is merely the manipulation of *abstract ideas* is clear. The data referred to by Applicant’s word “goal” is simply an abstract construct that does not limit the claims to the transformation of real world data (such as monetary data or heart rhythm data) by some disclosed process. Consequently, the necessary conclusion under *AT&T*, *State Street* and *Warmerdam*, is straightforward and clear. The claims



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take several abstract ideas (i.e., “goals” in the abstract) and manipulate them together adding nothing to the basic equation. Claims 1-17 and 19-54 are, thereby, rejected under 35 U.S.C. 101.

17. Regarding the “system” recitals in claims 10 – 17, 28-36, 46-54, the invention is still found to be nonstatutory. Any other finding would be at variance with current case law. Specifically, the Federal Circuit held in *AT&T v. Excel*, 50 USPQ2d 1447 (Fed. Cir. 1999) that:

Whether stated implicitly or explicitly, we consider the scope of Section 101 to be the same regardless of the form -- machine or process -- in which a particular claim is drafted. *AT&T v. Excel*, 50 USPQ2d 1447, 1452 citing *In re Alappat*, 33 F.3d at 1581, 31 USPQ2d at 1589 (Rader, J., concurring) (emphasis added.)

18. Examiner considers the scope of Section 101 to be the same regardless of whether Applicant *claims* a “process”, “machine”, or “product of manufacture”. While the “system” recitals in the preambles of claims 10 – 17, 28-36, 46-54 make the claims ostensibly drawn to be “apparatus” claims, they are insufficient by themselves to limit the claims to statutory subject matter. Examiner’s position is clearly consistent with *Alappat*, and *AT&T* and is implicitly consistent with *Warmerdam* and *State Street*. Accordingly, those claims are also properly rejected.

### ***Claim Rejections - 35 USC § 112***

19. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

20. Claims 1-17 and 19-54 are rejected under 35 USC 112, first paragraph because current case law (and accordingly, the MPEP) require such a rejection if a 101 rejection is given because when Applicant has not in fact disclosed the practical application for the invention, as a matter of law there is no way Applicant could have disclosed *how* to practice the *undisclosed* practical application. This is how the MPEP puts it:

("The how to use prong of section 112 **incorporates as a matter of law** the requirement of 35 U.S.C. 101 that the specification disclose as a matter of fact a practical utility for the invention.... If the application fails as a matter of fact to satisfy 35 U.S.C. § 101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 U.S.C. § 112."; In re Kirk, 376 F.2d 936, 942, 153 USPQ 48, 53 (CCPA 1967) ("Necessarily, compliance with § 112 requires a description of how to use presently useful inventions, **otherwise an applicant would anomalously be required to teach how to use a useless invention.**"). See, MPEP 2107.01(IV), quoting In re Kirk (emphasis added).

Therefore, claims 1-17 and 19-54 are rejected on this basis.

21. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

22. Claims 1-17 and 19-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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23. Specifically, Applicant has amended the language to recite: "...the goal being associated with a training objective of a student." The word "associated" is undefined and it is unclear whether this word limits the claims to statutory subject matter. Applicant asserts that the "training objective of a student" "limitation" makes the claims statutory, but it is unclear what this phrase has to do with the invention beyond a vague "association" with it. Is the association a close one where the goal is the "training objective", or is it a loose one where they were simply made or considered at the same time...or even just some mental association. Applicant's added phraseology does not limit the claim to statutory subject matter and makes the disclosure vague in that it fails to particularly point out and distinctly claim the subject matter which Applicant regards as the invention under 35 U.S.C. 112 doctrine.

### ***Response to Arguments***

Applicant's arguments filed 26 OCT 2005 have been fully considered but they are not persuasive. Specifically:

#### **Argument 1**

The Office Action alleges that claims 1-9, 19-27, and 37-45 are not claimed be practiced on a computer and that the claims are not limited to practice in the technological. (Page 3, paragraph 5.) However, claims 1-9, 19-27, and 37-45 are claimed to be practiced n a computer and are thus limited to practice in the technological arts. For example, claims 1, 19, and 37 are directed to computer-implemented methods. Moreover claims 2-9, 20-27, and 38-45 ultimately depend from independent claims 1,19, and 37.

Examiner withdraws any traditional arguments regarding whether the claims are practiced on a computer. Recent Board of Appeals decisions clarified that issue and the issue of whether something is in the "technological arts" is not in case law, therefore should not be asserted.

Examiner does not, however, withdraw any other basis for making §101 or §112 rejections in this case.

### **Argument 2**

The Office Action further alleges that "none of the claims are limited to, practical applications in the technological arts and that the 'Applicant's goal references are just abstract ideas'." (Page 3, paragraph 6.) However, the claimed invention of claims 1-54 is directed to the technical art of student training using a computer system.

Again, Examiner has withdrawn any traditional arguments regarding whether the claims are practiced on a computer. Recent Board of Appeals decisions clarified that issue and the issue of whether something is in the "technological arts" is not in case law, therefore should not be asserted.

Examiner does not, however, withdraw any other basis for making §101 or §112 rejections in this case.

### **Argument 3**

The claimed invention does not merely manipulate an abstract idea or perform a purely mathematical algorithm. For example, claim 1 is directed to a computer implemented method that includes the features of "receiving a goal, the goal being associated with a training objective of a student" and "evaluating the progress toward the goal and provides feedback that further motivates accomplishment of the goal for use in the presentation" The claimed goal is not abstract but is "associated with a

training objective of a student." Both features support training a student in a presentation, which is a practical application. All of the above features are practical applications limited to the technological arts.

Applicant asserts that "the claimed goal is not abstract but is associated with a training objective of a student." That assertion is insufficient to limit the claims to statutory material.

The fundamental issue is: Did Applicant limit the claims to a practical application?

Specifically, the topic of "associating" a "goal," of unspecified scope, with a "training objective of a student," also of unspecified scope, is a "field of use" that encompasses an undefined scope of invention...it is not a practical application limiting the claims to a defined scope of invention.

The scope of the claimed "goal" (as well as that of the claimed "training objective of a student") is undefined and has an unfettered scope that includes the goals and objectives of:

memory training;

math training;

aerobic training;

language training;

unicycle training;

combat training;

musical training;

juggling training;

Zen satori achievement training;....and even

criminal methods training for criminal purposes (yes, even this is within the claim scope...although it is, in all likelihood, against public policy and would also fail §101 on that basis alone.)

All these things are fairly within the unfettered scope of the claimed "goal" or "training objective." Each of these possibilities is a different invention. Applicant is free to select whatever kind of training he seeks to patent...and whatever kind of real world data to effect that kind of training, but Applicant must select and disclose a limitation to an invention (i.e., to a practical application) in order to receive a patent for that self same invention.

Even if Applicant is trying to say that the presentation's effect on the student causes a physical effect on the student, Applicant has not specified the desired effect...whether that effect is a mental training effect (such as faster recognition rates per unit of time,) a physical training effect (such as improved aerobic capacity as measured by lung capacity and blood O<sub>2</sub> levels), or a mind and hand coordination skill (such as improved surgery skills as measured by coordination of stimulus and response reactions of the student.) Applicant has merely recited the field of use of "training" without disclosing any real world specification of whether that training is in the muscle, brain, lung, immune system, or whatever...much less any real world data used to effect this training in the real world.

#### **Argument 4**

Similarly, independent claim 10 includes the features of "logic that receives a goal, the goal being associated with a training objective of a student" and "logic that evaluates the progress toward the goal and

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provides feedback that motivates accomplishment of the goal for use in the presentation."

Applicant's word "Logic" refers to nothing but a Boolean algorithm. Claiming that it is used for achieving an unspecified "goal" or "training objective" adds nothing to the basic Boolean equation. Taking several abstract variables (i.e., the claimed "goal" or the claimed "training objective") and manipulating those abstract variables through Boolean logic brings no statutory material to the claim. The claim remains abstract under In re Warmerdam.

#### **Argument 5**

Also, independent claim 19 includes the features of "presenting information indicative of a goal, the goal being associated with a training objective of a student" and "monitoring progress toward the goal and providing feedback that further motivates accomplishment of the goal in the simulated environment."

Again, Taking several abstract variables (i.e., the claimed "goal" or the claimed "training objective") and manipulating those abstract variables through Boolean logic brings no statutory material to the claim. The claim remains abstract under In re Warmerdam.

#### **Argument 6**

Independent claim 28 includes the features of "logic that presents information indicative of a goal, the goal being associated with a training objective of a student" and "logic that monitors progress toward the goal and provides feedback that further motivates accomplishment of the goal in the simulated environment" Also, independent claim 37 includes the features of "receiving indicia representative of a goal into a model, the goal being associated with a training objective of a plurality of students" and "monitoring progress of the plurality of students toward the goal,"

and "providing feedback that further assists the plurality of students in accomplishing the goal." Independent claim 38 similarly includes the features of "receiving an indicia representative of a plurality of goals into a model" and "monitoring progress of a student toward the goal and providing feedback that assists the student in accomplishing the plurality of goals."

Also, independent claim 46 includes the features of "logic that receives indicia representative of a plurality of goals into a model, the plurality of goals being associated with a training objective of a student," "logic that monitors progress of the student toward one of the plurality of goals," and "logic that assists the student in accomplishing the plurality of goals." All of the above features are practical applications limited to the technological arts and produce useful, concrete, and tangible results.

Applicant's word "Logic" refers to nothing but a Boolean algorithm. Claiming that it is used for achieving an unspecified "goal" or "training objective" adds nothing to the basic Boolean equation. Taking several abstract variables (i.e., the claimed "goal" or the claimed "training objective") and manipulating those abstract variables through Boolean logic brings no statutory material to the claim. The claim remains abstract under In re Warmerdam.

### **Argument 7**

The Office Action further alleges that "The word 'associated' is undefined and it is unclear whether this word limits the claims to statutory subject matter. (Pages 3-4, paragraph 7.) The Office Action alleges that The word "associated" is undefined and it is unclear what this phrase has to do with the invention beyond a vague 'association' with it. Is the association a close one where the goal is the "training objective", or is it a loose one where they were simply made or considered at the same time...or even just some mental association.

Applicant respectfully disagrees. In accordance with MPEP § 2111.01, the words of the claim must be given their plain meaning unless Applicant has provided a clear definition in the specification. For example, a plain meaning of "associate" is "following or accompanying; concomitant" (The American Heritage College Dictionary, Third Edition, Houghton Mifflin Company.) The Office Action has failed to apply the plain meaning of "associate" in order to interpret the claims.

Notice that Applicant asserts in his definition of the word "associate" that:



"...a plain meaning of "associate" is..."

Notice further that he did not say:

"...the plain meaning of associate is..."

There were several possible meanings of the word "associate" in the reference Applicant cites. Applicant chooses one of those meanings and presents it as the one he intended all along.

Although this selection of the meaning of the word "associate" is not in the Specification or Claims, Examiner accepts this meaning as prosecution history estoppel as to what meaning was intended by Applicant. Therefore, the association is not a pointer association or a nomenclature association or any association other than one that arises from merely "accompanying" the student objective...whatever that means, or being "concomitant" with the student objective...whatever that means.

Regardless, such a disclosure is still insufficient to define a practical application (i.e., to provide a statement of what the invention actually is.)

### **Argument 8**

Additionally, the specification discloses embodiments that provide training applications, e.g., the GBS training application as shown in Figure 8. Referring to the invention of claim 1, the Goal-Based Scenario (GBS) training application may support a goal being associated with a training objective of a student"

The fundamental issue is: Did Applicant limit the claims to a practical application?

Specifically, the topic of "associating" a "goal," of unspecified scope, with a "training objective of a student," also of unspecified scope, is a "field of use" that

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encompasses an undefined scope of invention...it is not a practical application limiting the claims to a defined scope of invention.

The scope of the claimed "goal" (as well as that of the claimed "training objective of a student") is undefined and has an unfettered scope that includes the goals and objectives of:

memory training;

math training;

aerobic training;

language training;

unicycle training;

combat training;

musical training;

juggling training;

Zen satori achievement training;....and even

criminal methods training for criminal purposes (yes, even this is within the claim scope...although it is, in all likelihood, against public policy and would also fail §101 on that basis alone.)

All these things are fairly within the unfettered scope of the claimed "goal" or "training objective." Each of these possibilities is a different invention. Applicant is free to select whatever kind of training he seeks to patent...and whatever kind of real world data to effect that kind of training, but Applicant must select and disclose a limitation to

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an invention (i.e., to a practical application) in order to receive a patent for that self same invention.

Even if Applicant is trying to say that the presentation's effect on the student causes a physical effect on the student, Applicant has not specified the desired effect...whether that effect is a mental training effect (such as faster recognition rates per unit of time,) a physical training effect (such as improved aerobic capacity as measured by lung capacity and blood O2 levels), or a mind and hand coordination skill (such as improved surgery skills as measured by coordination of stimulus and response reactions of the student.) Applicant has merely recited the field of use of "training" without disclosing any real world specification of whether that training is in the muscle, brain, lung, immune system, or whatever...much less any real world data used to effect this training in the real world.

### **Argument 9**

In regards to claim 10, the Office Action alleges that "'motivation' is a human thought and the inclusion of it does not make the invention statutory." (Page 4, paragraph 8.) However claim 10, includes "logic that evaluates the progress toward the goal and provides feedback that further motivates accomplishment of the goal for use in the presentation", (Emphasis added.) The feature does not include the word "motivation" (which the Office Action construes as being "a human thought") but does include the word "motivates", which has a common meaning of "impel." (The American Heritage College Dictionary, Third Edition, Houghton Mifflin Company.) Claim 10 is directed to an invention that "motivates accomplishment of the goal" and is not directed to human thought.

Applicant asserts that the word "motivates" does not describe a mental state....apparently to show that it is "real world." Applicant makes the apparent

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implication that the word "motivates" describes some sort of real world physical state of motivation akin to the word "impel."

If the motivation is not mental, then the only clear alternative is some sort of physical implication, in order to satisfy §101.

Applicant's implication is remarkable: Does Applicant imply that the claimed invention physically impels or "motivates" students through a goal? Examiner doubts that and believes that the "impelling" or "motivating" is actually a mental experience, rather than some sort of physical flinging or catapulting experience, as implied by Applicant.

If the motivation is not mental, and it is not physical, then what else is it? Applicant does not say.

The physical impelling of students through a goal makes no sense, at least to most professors this Examiner has observed. So, the only other reasonable alternative is the interpretation made by Examiner...that it is a state of mind.

Therefore, Examiner maintains his interpretation that Applicant's word "motivates" is a pure human thought and the rejection is not withdrawn.

### **Argument 10**

The Office Action further alleges that Applicant cites no specific results to define a useful, concrete, and tangible result and does not specify the associated practical application with the kind of specificity that the Federal Circuit requires. (Page 6, paragraph 13.) However, as previously discussed, the claimed invention (e.g., independent claims 1, 10, 19, 28, 27, and 38) provide useful, concrete, and tangible results with associated practical applications that are consistent with the specificity affirmed in the AT&T v. Excel Communications, Inc. decision.

The fundamental issue is: Did Applicant limit the claims to a practical application? Specifically, the topic of "associating" a "goal," of unspecified scope, with a "training objective of a student," also of unspecified scope, is a "field of use" that encompasses an undefined scope of invention...it is not a practical application limiting the claims to a defined scope of invention.

### **Argument 11**

Referring to claim 1, the claimed invention is directed to a "goal being associated with a training objective of a student." The goal is not associated with an algebraic word problem, a Boolean logic problem, a fuzzy logic algorithm, a probabilistic word problem, a philosophies idea, or a vague expression.

Applicant asserts that: "The goal is not associated with an algebraic word problem, a Boolean logic problem, a fuzzy logic algorithm, a probabilistic word problem, a philosophies idea, or a vague expression."

Well, if that is Applicant's wish, Examiner will accept the stipulation that the goal has no association "with an algebraic word problem, a Boolean logic problem, a fuzzy logic algorithm, a probabilistic word problem, a philosophies idea, or a vague expression."

Again, this estoppel does not solve the issue of what the practical application is. Accordingly, the 101 rejections stand.

### **Argument 12**

The claimed invention in claims 1-54, as a whole, produces tangible, useful results. For example, the claimed invention in claim 1 creates a

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presentation supporting a goal that is associated with a training objective of a student by integrating information that motivates accomplishment of the goal, evaluating the progress toward the goal, provides feedback to the student and adjusts feedback based on the progress of the student. The created presentation produces results that are useful, concrete, and tangible.

Again, Examiner does not believe the "motivation" or "impelling" in this argument is a physical event and believes it describes a mental state that does not provide statutory matter to the claim. Accordingly, the 101 rejections stand.

### **Argument 13**

The Office Action further alleges that Applicant's word "goal" is simply an abstract construct that does not limit the claims to the transformation of real world date. (P4 8, paragraph 20.) However, independent claims 1, 10, 19, 28, 37, and 46 include "the goal being associated with a training objective of a student" and thus clearly claim the kind of goal being used. Moreover, claims 1, 19, and 37, which are directed to computer-implemented methods are directed to statutory subject matter...

The fundamental issue is: Did Applicant limit the claims to a practical application?

Specifically, the topic of "associating" a "goal," of unspecified scope, with a "training objective of a student," also of unspecified scope, is a "field of use" that encompasses an undefined scope of invention...it is not a practical application limiting the claims to a defined scope of invention.

### **Argument 14**

The Office Action further alleges that while the "system" recitals in the preambles of claims 10-17, 28-36, and 46-54 make the claims ostensibly drawn to be "apparatus" claims, they are insufficient to limit the claims to statutory subject matter. (Page 9, paragraph 22.) However, claim 10 includes the features of "logic that receives a goal, the goal being associated with a training objective of a student" and "logic that

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evaluates the progress toward the goal and provides feedback that further motivates accomplishment of the goal for use in the presentation". (Emphasis added.) Independent claim 10 is directed to useful, concrete, and tangible results. Similarly, independent claim 28 includes the features of "logic that presents information indicative of a goal, the goal being associated with a training objective of a student" and "logic that integrates information that motivates accomplishment of the goal in a simulated environment for use in the presentation". Similarly, independent claim 46 includes the features of "logic that receives indicia representative of a plurality of goals into a model, the plurality of goals being associated with a training objective of a student" and "logic that integrates information that provides assistance with achieving the plurality of goals into a tutor for use in the presentation". Claims 11-18, 29-36, and 47-54 depend from claims 10, 28, and 46. Plus, claims 10-18, 28-36, and 46-54 are directed to statutory subject matter,

Applicant's word "Logic" refers to nothing but a Boolean algorithm. Claiming that it is used for achieving an unspecified "goal" or "training objective" adds nothing to the basic Boolean equation. Taking several abstract variables (i.e., the claimed "goal" or the claimed "training objective") and manipulating those abstract variables through Boolean logic brings no statutory material to the claim. The claim remains abstract under In re Warmerdam.

### **Argument 15**

Claims 1-54 are rejected by the Office Action under 35 U.S.C. 112. The Office Action alleges that claims 1-54 are rejected under 35 U.S.C. 112, first paragraph "because current case law (and accordingly, the MPEP) require such a rejection if a 101 rejection is given". As discussed above, claims 1-54 are directed to statutory subject matter under 35 U. S.C. § 101. Thus, Applicant requests reconsideration of claims 1-54.

Applicant made no persuasive arguments that overcome the 101, therefore, there is no basis for withdrawing the 112, first paragraph rejection either.

### **Argument 16**

Claims 1-54 are rejected by the Office Action under 35 U.S.C. 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter with applicant regards as the invention.

The Office Action specifically alleges that "The word 'associated' is undefined and it is unclear whether the word limits the claims to statutory subject matter." (Page 11, paragraph 27) In accordance with MPEP § 2111.01, the words of the claim must be given their plain meaning unless Applicant has provided a clear definition in the specification. For example, a plain meaning of "associate" is "following or accompanying; concomitant" (The American Heritage College Dictionary, Third Edition, Houghton Mifflin Company.) The Office Action has failed to apply the plain meaning of "associate" in order to interpret the claim. Applicant respectfully submits that claims 1-54 is definite and distinct in claiming the subject matter that Applicant regards as the invention in light of the plain meanings of the words. Applicant requests reconsideration of claims 1-54.

So, the goal "accompanies" the student objective...in some way. Is this some sort of physical accompaniment? If so, what kind?

Yes, Applicant goes to the dictionary and finds one of the myriad definitions of associate there and selects it as the one that was intended all along, but even that definition is vague in this claim context. It is unclear why the goal "accompanies" the student objective. In fact, it is unclear what this really means. Does this mean that one has a basketball hoop (goal) that is somehow accompanying the student objective of getting a basket? Does it mean that one has a finish line tape (goal) that is somehow accompanied by the student objective of finishing the race quickly? Does it mean that one has a solution set to some math problems (goal) that is somehow accompanying the goal of problem solving?

If the answer is all of the above, then we have a word that refers to multiple inventions and is ant the very least ambiguous, if not vague.



Yes, Applicant was able to find a definition for the word "associate" in the dictionary (otherwise, it wouldn't be in the language, right?) but that word does not specify the scope of the invention...it is vague as to what it refers in the patent sense. Applicant's arguments are not persuasive...the rejections are not withdrawn on this basis.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Wilbert L. Starks, Jr. whose telephone number is (571) 272-3691.

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A handwritten signature in black ink, appearing to read "Wilbert L. Starks, Jr.", written diagonally across the page.

WLS

06 January 2006

**Wilbert L. Starks, Jr.**  
**Primary Examiner**  
**Art Unit - 2121**